Induced Seismicity Ground Motion Workshop February 13-14

Guidelines and suggestions for oral presentations

- All presentations will be limited to 20 mins.
- Thus, please try to streamline talks to highlight 2-3 key messages to deliver on estimating GM better for induced EQs, the high/low points of your models, whether it be from GMPEs or more physically based approach
- Please provide a copy of your slides to the organizers.
- All talks will be webcast live (but not archived) by default; if you object we can turn off the webcast for your talk.
- Below are some standard slides that we would like talks to include. This is intended to facilitate comparisons. Not all of these figures need to be in the main talk, you can put some in “extra slides” at the end of the talk. Not all of these points will apply to all presenters.

For stress drop presentations:

- Method (briefly)
- Exact events and stations used (can put this in appendix slides).
- How are moments/magnitudes calculated or what catalog are they from?
- Moment vs corner frequency
- Brune stress drop (you can also show a different model but please include Brune).
- Show error bars as 2-sigma (95% confidence).
- Locations/quality of locations/depths
- Some comments on stress drop vs depth.

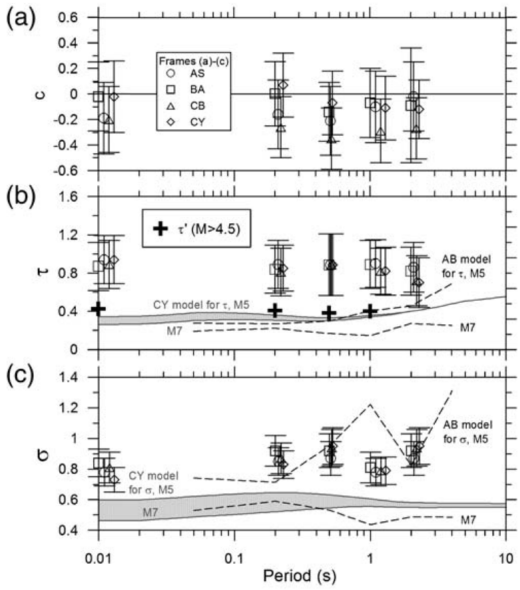
For ground motion model talks:

- Residuals should be computed as: ln(data) - ln(model)
- The standard IMT set for this workshop is: PGA, PGV, 0.2 s, 1 s, 2 s
- Example figures below are taken from the Abrahamson et al. (2013) PEER report and Scassera et al. (2009; BSSA).
- Where models work well or poorly, some comments on the physical or data reasons for such.

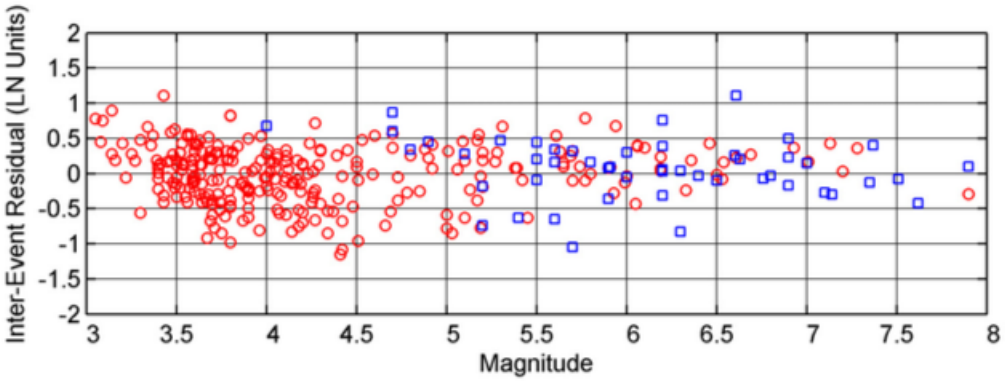
Standard slides

1. Overview of the model (briefly)
    - Functional form
    - Development method (e.g., empirical, simulation)
    - Data screening (e.g., magnitude range, distance range)
    - Data source (e.g., Rennolet et al., or give details if you compiled/processed your own data)
    - Component definition (e.g., as-recorded peak horizontal, RotD50)

2. Mean residual (c), inter-event (event term) standard deviation (tau), and intra-event (between event) standard deviation (phi) as a function of period. Do not restrict plot to the standard IMT set.
    - For all data within 50 km distance
    - For all data within 300 km distance
    - Example from Scassera et al. (2009):



3. Inter-event residual (eta) as a function of magnitude. Example from Abrahamson et al. (2013). Note that the color in this plot is for different regions and not pertinent for this workshop. Include one for each IMT.



4. Intra-event residual (epsilon) as a function of epicentral distance (since we generally do not have finite rupture models for the induced events). Plotting binned means as in this plot is helpful. Include one for each IMT.